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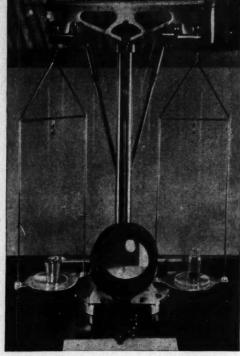
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The P-P factor is now accepted as being closely related chemically to nicotinic acid if, indeed, it is not identical with that compound (1). Nicotinic acid has been used successfully in the treatment of human pellagra (2) and there is evidence to support the belief that the P-P factor is intimately associated with essential enzyme reactions in the body (3). A laboratory test has been devised for the early clinical detection of pellagra (4) and there is today better agreement as to the basic dietary requirements for the management of florid pellagra (1). While the situation as regards endemic pellagra has, in general, shown improvement during recent years, an occasional report indicates that endemic pellagra still constitutes a major medical problem in some localities (5). Authorities agree that the old adage relating to an ounce of prevention being the equal of a pound of cure applies particularly well in the case of pellagra. Consequently, in specific regions of this country certain control measures have been advocated in an endeavor to bring this deficiency disease under permanent control. The most promising of these measures are

the issuance of yeast rations and popular education to the desirability of home production of foods rich in the P-P factor, especially during late winter and early spring. The problem of permanent control of pellagra has been clearly and briefly defined as follows:

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(1). 1938. J.A.M.A. 110, 1665. (2). 1938. J.A.M.A. 111, 584. 1938. Ibid. 111, 613. 1938. Ibid. 110, 289.

1938. J.A.M.A. 111, 28.
 1938. J. Med. Assn. State of Alabama. 8, 52.
 1938. J. Med. Assn. State of Alabama. 7, 475.

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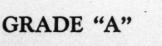
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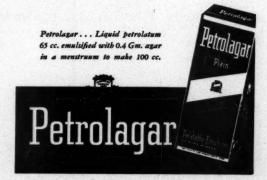
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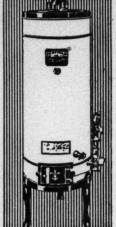
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DELAWARE STATE MEDICAL JOURNAL

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THE MEDICAL APPROACH TO SEX INSTRUCTION IN THE SCHOOLS OF DELAWARE®

CLARENCE J. PRICKETT, M. D. Smyrna, Del.

Any physician of experience will vouch for the fact that many of the cases which come under his observation reveal conditions which developed as the result of ignorance. of such cases are attributable to ignorance of the true nature and function of sex. It is not difficult to find the reasons for sexual practices and attitudes which daily, in this supposedly enlightened age, are leading adolescents, and adults, towards economic ruin, physical disability, psychic disturbances, and spiritual impoverishment. From infancy most of our American children have been taught, directly and indirectly, that sex is nasty, that it is evil, and that it is a fit subject only for dark corners and low companions; and yet all of them have at the same time been constantly subjected to the calculated eroticism of the cheap magazine, commercialized vice, and many enterprises and activities which appeal to the idle romanticism or the low tastes of the immature. The consequence of making sex discussion taboo for children and adolescents and of allowing them, without proper guidance, to be subjected to the stimulations of a civilization which seems to derive a large part of its entertainment from sex, is to allow our children to drift into the limbo of illicit relations and anti-social practices. Who but the physician is in a position fully to realze, in all of its ramifications, the enormity of the social problem thus created? As physicians, we have long been concerned with repairing bodies and minds damaged by the sexually unguided.

I believe the time has now come when we should concern ourselves with adequate measures to provide for sex education. Such a measure is the proposal that the children of Delaware be educated in the principles of social hygiene with especial emphasis on sex education. There seems to be little doubt but that some such program should be undertaken; on basic questions of procedure, however, there seems to be considerable confusion. If this paper contributes to the formation of policy by its warnings and recommendations, it will have served its purpose.

As physicians we could cite innumerable cases of young lives which were ruined by sexual ignorance, ignorance which brought in its train venereal diseases, undesirable, unhappy marriages, serious maladjustments which might lead to psychoses. We could cite such cases until those to whom sex instruction has been an unconsidered problem would wish to rush forth and "do something" without further reflection. But there, alas, is the point upon which all progress must hinge. More harm can be done in this battle for youth by the active participation of the crusader or by the activity of the inadequately trained than is being done by our present inactivity. Illconsidered experiments in sex education can have such unfortunate results that all progress in the communities affected would be blocked for years to come. Merely to rush forth and give information to youth is not enough. Youth would still be conditioned to the idea that sex is fundamentally unclean. and youth would still be tempted to put his new-found knowledge to illegitimate use. Many parents to their sorrow have found this to be true. In the Readers' Digest for September, 1938, one disillusioned mother testifies to this fact. She is forever conditioned against imparting any information to youth, because

^{*}Presidential Address, delivered before the Medical Society of Delaware, Dover, October 12, 1938.

her own son used the information she gave him as the basis for a series of sexual experiences. The fault in this and similar cases, it seem to me, is that the emphasis has been upon giving information rather than instruction. Such a procedure is analogous to turning a boy loose in a laboratory with information as to how to mix dangerous chemicals but without instruction as to their potentialities for good and for evil. More harm has been done to the cause of sex education by its too eager friends than by all of its enemies. The problem has waited a long time for solution; there is nothing to be gained by precipitate action; there is certainly much to be lost by poorlyadvised action.

Because it is peculiarly within our province to know the great potentialities of sex both for evil and for good, we physicians must accept the responsibility of seeing to it that no irreparable damage is done by inadequate or misguided teaching; we must, of necessity, take the initiative in surrounding the movement for sex education with all of the safeguards that scientific thought can provide. True it is that sex education, successfully carried out, would pay society for its cost, however great that be. In the reduction of venereal diseases alone, the returns would be immeasurable. But such education, rashly or poorly attempted, would be costly to society even though it were achieved without any increase in our educational budget. Our not inconsiderable influence in our respective communities must be brought to the support of those who are working for a program of social hygiene in the Delaware schools, but we must be insistent upon the observance of precautions to keep the program on a safe, sane footing.

The first step contemplated is the education of the parents as to the necessity for sex instruction in the schools. I agree that their approval and cooperation are necessary. We should enlighten the parents as to anything the schools propose to do. In this instance we should go further. We should teach the parents their duty to the children in the home. Through adult education groups we should instruct the parents and any other adults who are responsible for the guidance of children in the home as to how they can best impart

knowledge in response to the questions which all children are likely to ask. If we are to make the beginnings of a normal, right attitude toward sex, the parent of whom such questions are asked must answer them without evasion, and the answers must be accurate, natural, satisfying. This is a parental duty that cannot be safely delegated, because no satisfactory reason has ever been invented as to why the child should wait for an answer. Putting the matter off by such makeshift answers as: "You will learn all that when you are old enough," or "You must never mention such things" only serve to turn natural curiosity into a morbid desire to know, until the child's whole attention is focused on the forbidden subject.

This danger of focusing the child's attention on sex must be foreseen in any part of a sex education program. Steps must be taken to insure against placing any emphasis that would arouse the child to unhealthy imaginings or practices. Even the act of instituting a sex education program in Delaware, with the attendant discussions, must not be brought to the attention of the children themselves. Sex would thus be thrust before them as a problem, rather than as a normal thing to be considered without excitement. Sex is a problem, but it must be the problem of the adult who has the guidance of the child at heart. Rather than to begin a program under the label of sex education, it would be better in our dealings with the public to omit all reference to sex as a separate consideration, to refer at all times to the program as "education for social hygiene." Only in this manner can undesirable attitudes be avoided.

It is always held that moral health, no less than physical and mental health, is a personal asset of the greatest social significance. If we are to use the public school as an agency for instruction in social hygiene, we must make sure that the materials of instruction, the instructors, and all school contacts are such as to insure adequate physical and mental growth under the steadying influence of increased moral perceptions.

While we are waiting for an organized program to be agreed upon, there is one thing which can be done everywhere, a thing which, to me, is fraught with possibilities out of all

proportion to its simplicity. It is merely this: to provide for the mingling of the sexes at every age level under circumstances which will make the sharing of daily tasks and pleasures in itself a normal satisfying thing, quite apart from a consciousness of sex. Mutual aid, mutual appreciation, a community of interests, would do much to erase the evils of segregation, to substitute a mutuality of living for the mutuality of sexual curiosity and stimulation. It is normality we are striving for in the entire learning process. These principles of sex ethics must early be instilled in the minds of every pupil. They are the prerequisites of success in social hygiene, especially in those phases which have to do with the imparting of knowledge in such subjects as may properly lead to a consideration of the processes of fertilization in flowers and in animals, and of procreation in human beings.

I have been much concerned with the questions which must be answered before we can formulate a program. Whom shall we teach? What should we teach at the various age levels? Who shall teach it? There are some persons who have with great facility answered these questions. Yet reflection tells us that the answers given with such ease are seldom the true answers. We are dealing in human values, with unpredictable factors which make answers unreliable. We cannot afford to be dogmatic.

But it seems safe to say that every one educable should be taught directly and indirectly the rudiments of such knowledge as will make for better social hygiene. At all age levels the child's honest search for knowledge, his natural curiosity, must be satisfied, satisfied at once without prudery, and most certainly, without the sacrifice of any of the innate modesty which is the chief charm of human relationships. But under no conditions must information be forced upon the child, even by the most adroit of teachers.

If such a prohibition be accepted, as I think it must, we see the folly of drawing up a syllabus for social hygiene for our grammar schools. We cannot say that every fourth-grader, as does the so-called "Florida Outline," is ready to receive and profit by the knowledge of how animals reproduce. Nor can we say that every child in the eighth grade

who is taught prenatal development and the development of the reproductive function, as the same outline suggests, will thereafter have an attitude toward sex that is normal for that age level. A syllabus is an arbitrary set of recommendations to which a teacher is bound. Any proposed program should be flexible enough to meet the needs of the individual. The question of who is to determine those needs is an open one.

Besides inflexible outlines of what should be taught we have been presented with ill-considered solutions of who shall do the teaching. For example: 1. We are already paying our regular staff to teach; let them do it. 2. We have a school nurse; who is better qualified? 3. Let the school superintendent, or an outside expert, give little talks from time to time. 4. Put some good books in the pupils' hands. Let us consider these proposals rather closely.

If we had the teachers in each school, who, by reason of training, temperament, good sense, and those qualities which cause the students to love and respect them, were fitted for the work, I should say it would be desirable for the teachers, overburdened though they may now be, to accept this further responsibility. If there were enough suitable teachers I should say let them handle a full course in social hygiene. But the inescapable fact is that there are very few such teachers. In fact, there are very few such persons. It is better to have no instruction in the sexual phases of social hygiene than to have information given to students by untrained, embarrassed, abnormal, or unrespected teachers. The idealism of youth cannot be aroused and fostered that way. Even though a teacher were to meet all requirements except that of specialized training, that teacher would still be unsuitable until the specialized training had been given.

The school nurse is even more poorly prepared to do what we wish done in our Delaware schools. True, she knows "the facts of life;" she has seen the phenomena of pregnancy and birth; she is conversant with the problems arising from sex, at least in respect to such things as venereal diseases. But that does not make her a fit teacher of youth, one in whose hands is to be placed the trust of

molding our young men and women. She can at the best, or worst, merely give information. And that alone is worse than useless.

The other suggestions as to who shall teach have this fault among others: they serve to center an unhealthy attention on sex. To give isolated talks or lectures, no matter by whom, is to give sex prominence. To put sex books into the hands of students would do the same thing, with the added disadvantages of supplying information without a chance for interpretation or the correction of wrong impressions.

We are indeed faced with a problem difficult of solution. Yet the problem must be solved, whatever the expenditure of time and money. Fortunately our state is so compact as to size, and its administration of education so admirable, that I feel safe in making certain recommendations.

Inasmuch as we do not have men and women in regular teaching positions who should be entrusted with the most vital parts of a social hygiene program, and inasmuch as it seems inadvisable and inexpedient to bring into the schools for brief periods an expert in sex matters to teach the children directly by isolated lectures, I propose the employment by the state of Delaware of an adequate number of men, not less than one for each of the counties exclusive of Wilmington, and certainly not less than two for Wilmington, whose duties shall be the formulation of principles to govern the social hygiene program, the selection of suitable teachers from the school systems and the training of those teachers, and the meeting with all other teachers and with parents, singly and in groups, for instruction in social hygiene. The men selected for these positions would ideally be physicians with special training in psychiatry, family men mature in attitudes and opinions, who could unobtrusively lead in the development of character based on sound knowledge and practice. The psychiatrist should be able to spend enough time in each school so that he could become a familiar figure to, and friend of, the teachers and pupils. This seems to be the only solution to the problem of how best to regulate the dissemination and diffusion of vital knowledge. The employment of

scientifically trained men would be a practical step of great moment not only in regards to their work in organizing social hygiene procedure but also in regards to their specialized services in the training of teachers for certification in this phase of education.

I am not unmindful of the practical difficulties in the way of securing an allocation of funds sufficient to carry out this program at once and to the full. Much depends also upon finding a sufficient number of men with the qualifications I have indicated. Men of that caliber usually have lucrative practices which they would not care to give up. But I feel that if we could make a beginning with one man in one section of the state under the conditions and with the prohibitions I have outlined, we could demonstrate that the plan is feasible, socially valuable, and worthy of extension to include the whole state.

To these, and there will be many, who object to the cost, I can only say that the hazard in any phase of education is that it may cost, not too much, but too little. Cheap education is seldom of any value either to the individual or to society; it may prove a positive danger to both.

As you are aware, it is customary for your President to address the Society, and it is also customary for the members not to discuss his paper during the session. I propose, with your approval, to modify the usual tactics, to this extent:

I ask you to authorize your President to appoint a special committee of five well-qualified members of this Society whose duties shall be the further development of the medical approach to sex education in Delaware, first, by securing from reliable sources such as the Federal Bureau of Education and those in charge of progressive programs in such states as Colorado and Michigan, information concerning the employment of psychiatrists in this field and the results to date; second, by formulating a definite set of recommendations through study of available facts along the lines suggested by this paper; and, third, by presenting these recommendations to a committee representing all of the interested groups in Delaware, as, for example, the State Board of Education, the Board of Education

of the City of Wilmington, the State Board of Health, and the Parent-Teachers' Association.

I, as President of your Society, seek your understanding and cooperation in this vital problem to the end that we shall do all in our power to see that no costly mistakes are made in Delaware. Our state is now one of the leaders in education among the forty-eight states. As physicians who recognize the importance of sex education to the well-being of the state, we must do everything reasonably within our power to further that leadership in establishing a model program for social hygiene. It is a challenge to us and to our schools that we cannot afford to ignore.

INDUSTRIAL LAW AND THE MEDICAL PROFESSION*

James B. McManus**
Wilmington, Del.

Compensation laws are not insurance schemes, nor mere vehicles for distributing charity, nor do they take money from the employer and give it to his employee without due process of law. They are based upon equally balanced legislation working for the benefit of both employer and employee. These laws are modern instrumentalities created for the purpose of administering law, calculated to disseminate an equal social justice among all men and women.

The Workmen's Compensation Acts of most states provide for reasonable and/or necessary medical, surgical and hospital services at the employer's expense, but limited as to time and amount, and leaving the question of reasonableness or adequacy to be determined by the body administering the act.

The main purpose to be accomplished by the medical benefit provisions of a compensation law is to cure and relieve the employee from the effects of the injury as quickly as possible and at reasonable expense. It is contended that it is to the interest of the employer to furnish the very best medical and surgical treatment in order to minimize the result of the injury.

The danger of incompetency on the part of the physician provided by the employer is quite remote as it is greatly to his interest to provide such service as will most quickly discharge the injured employee from the nonproducing ranks. Therefore, the law should be so applied as to secure to both the injured employee and his employer reasonable opportunity to conserve their mutual interests, which can be brought about by the supervision of the administering agency of the state. The natural effect of such procedure is to expedite the return of honest claimants to the walks of industry and prevent their misfortune from being exploited. And the advantages of this policy, if greater on one side than on the other, would appear to be on the side of the injured employee.

The obligation to "furnish reasonable surgical, medical and hospital services, medicines and supplies" during the "first thirty days after the injury" is one conferred upon the employer, which duty must be performed or reasonable efforts made to that end. The word "furnish" imports something more than a passive willingness to respond to a demand. It implies some degree of active effort to bring to the injured person the required relief. Reasonably sufficient provision for rendering the required service must be made. It should be brought to the attention of employees where such services are available in case of injury. Notices should be posted in conspicuous places, and such notices shoud be readable to at least a sufficient number of the employees to call the attention of all to their rights with regard to medical attention in case of injury.

Nevertheless, the law does not cast upon the employer the duty of active vigilance to discover cases of personal injury to their employees, but casts upon the injured employee such vigilance as they can reasonably exercise to bring such injuries to the attention of their employer as to need and desire for medical and surgical treatment. In other words, actual knowledge of the occurrence of the injury or notice had of same by the employer is a requisite for compensation and medical service, it being the legislative intent that the employer be permitted to furnish a physician or surgeon of his own choice, and if his selection be such as would satisfy a reasonable person, the employee would be personally liable for services rendered by any other physician

^{*}Read before the Medical Society of Delaware, Wilmington, October 13, 1937. **Secretary, Delaware Industrial Accident Board.

or surgeon. In the event that the medical and surgical attention provided was not considered competent or sufficient, redress can be had before the administering body as to its "reasonableness" or being furnished "as and when needed." And should the employee's incapacity or any part thereof be the direct result of unskillful medical treatment on the part of the employer's physician or surgeon his remedy is against the persons answerable therefor under the general law. On the other hand, should an injured employee abandon the medical and hospital service supplied by the employer and secure other treatment of his own choice, he does so at his own risk and his own expense unless he can satisfy the administering agency that the service supplied by the employer was unreasonable and inefficient or inadequate to such an extent as would justify the abandonment of it.

The problem of furnishing surgical, medical and hospital services, medicines and supplies is one of passing interest to hospital authorities and members of the medical fraternity and the cause of considerable contention before the administrators of Workmen's Compensation laws. The question arises as to whether the date of the accident is the date of the injury and therefore the time from which the statutory period of thirty days shall be reckoned. Also, whether the limitation period of thirty days shall be computed from the date when the result of the injury culminates in actual disability requiring medical treatment. The language of the Delaware statute, and reason, would seem to authorize the conclusion that medical and surgical services, as well as hospital, were intended to be rendered after the injury, which should be such as to indicate a physical injury requiring the services of an attending physician or surgeon. As to the additional services, there are certain conditions, such as application to the Board and determination of the character and length of the services to be furnished, that must be complied with, otherwise a charge against the employer for such additional services is without authority and the employee is personally liable.

As to negligence, improper treatment or malpractice on the part of the physician or surgeon, provided by the employer, it is generally held, inasmuch as it is incumbent upon the employer to furnish medical, surgical and hospital services, any aggravation of the injury and subsequent increase in disability due to such negligence, improper treatment or malpractice on the part of physician or surgeon, without any fault of the injured employee, is a legitimate expense of the employer even as to lack of skill or error of judgment. The remedy under the general law of negligence is available but not very practical. Conversely, if an injured employee receives negligent, improper or malpractice treatment by a physician of his own choice or should he fail to follow the directions of the employer's physician and his disability be prolonged, he must pay for the consequence.

The question as to whether a surgical operation is reasonable medical treatment or refusal of same is a legal right of the injured employee depends upon the facts of each case. It is true that a claimant for compensation owes it to himself and society in general to make use of every available and reasonable means to make himself whole. The law seems to be well settled that an injured employee seeking compensation must submit to an operation which will cure him when so advised by his attending physician, if there be no danger to life or health and no unusual risks. It is his duty if it fairly and reasonably appears that the result of such operation will be a real and substantial physical gain. Where, however, it appears that a risk of life is involved. although such risk is slight, a refusal to submit to an operation is not unreasonable. The idea is appalling that a human being should be compelled to take a risk of death, however slight it may be, in order that obligations of an employer be reduced. But to refuse to undergo a safe and simple surgical operation, which is fairly certain to result in a removal of disability for work and is not attended with serious risk, and is such as an ordinarily prudent and courageous person would submit for his own benefit and comfort would appear to be an unreasonable refusal. This is particularly true of employees suffering from inguinal hernia as the result of an accident, in view of the fact that hernia may be successfully cured in the great majority of cases by submitting to an operation and which is attended with little if any danger. The removal of cataracts to restore vision is an operation highly successful with no unusual risks from the nature of the operation proposed. Refusal to submit to an operation where there is doubt of success and beneficial effects not at all certain would not seem to be acting unreasonably.

What scope does the phrase "reasonable medical surgical and hospital services, medicines and supplies" cover? Does it include all the means and instrumentalities that are used to help effect a cure? Are splint, crutches, holding apparatus, trusses, false teeth, glass eyes and artificial limbs in the category of supplies? It may be said that some of these appliances are necessary in the proper treatment of an injury for the first thirty days and even where additional services have been granted, but does the law contemplate the furnishing of an artificial arm or leg or eye for one that has already been compensated for? It has become so common for a physician or surgeon to have a nurse as his assistant that such services are an incident to the treatment. Are the services of a nurse such as are reasonable after the physician or surgeon or hospital have ceased rendering service? There would not appear to be any warrant under the law for such services, other than incidental to medical or surgical attention. A discussion of this subject would be illuminating in view of the increased demand for a broader interpretation of this phrase.

Although heretofore lightly touched upon, it would probably be of some interest to those present to have a few words relative to fees, charges and recovery of same under compensation laws. While the administering agency of the state is given authority to arbitrate differences over fees or charges, no authority is given to award for medical services in excess of the amount limited by the law. Where the employer or insurer voluntarily incurs expense for such service in excess of the statutory amount, such excess cannot be deducted from the amount of compensation to which the injured employee is entitled. Should the employer refuse to meet the obligations, it is the practice to pro-rate the total amount of the fees or charges to the statutory amount

provided. As to recovery of fees by physicians and surgeons, it would appear as a matter of precaution that they should notify the employer of their patients of the service being rendered while such service is being rendered. In laws making the employer liable for reasonable medical expense, as in this state, the physician or surgeon is permitted to recover in a direct action at common law against the employer for the liability under the statute. But no action will lie against an employer to recover for medical treatment rendered to an injured employee by a physician who has not been requested to furnish such treatment to the knowledge of the employer.

A field that has been but little considered as within the purview of the compensation law of this state and which has been broadened by a recent act of the General Assembly is that of occupational disease. Generally speaking, an occupational disease is one contracted in the usual and ordinary course of events, which from the common experience of humanity is known to be incidental to a particular employment. But for several years the law has been construed to include anthrax contracted under certain conditions and the interpretation has been accepted by both employer and employee. Other minor ailments such as dermititis, chrome bites, ivy poisoning, and bursitis arising from and in the course of the employment have also been compensated for. Other diseases recognized as occupational have been brought within the definition of the term "injury" and "personal injury" as related to violence to the physical structure of the body in man's effort to earn a livelihood: In the determination of the right to payment of compensation for such diseases the medical profession will undoubtedly be called upon to take a leading part, not in unraveling the ambiguity of terms under which the diseases are to be classified, but in establishing the wages and length of contact by the employee with the disease producing the disability. Anthrax. with restrictions removed except arising out of and in the course of the employment; lead poisoning in all its phases, bring a subject of controversy; carbon disulphide and hydrogen sulphide poisoning, arising out of artificialsilk production; mercury, arsenic and phosphorus poisoning through processes involving

the use of or direct contact with these chemicals or their preparations or compounds; and poisoning by wood alcohol or benzene-these are among the occupational diseases coming within the purview of the recent amendments to the Delaware Compensation Law. Silicosis, prevalent among dusty-trade employees, is still a debatable and acute problem. Factors other than the concentration of dust alone, seem to play a part in the development of this disease. Just what the factors are and how much of a part they play remains to be definitely determined. Prolonged study and medical observation will be necessary before we can do other than decide each case upon its own merits.

In closing, it has occurred to me that the opportunity afforded your profession to aid in the rehabilitation of those who come under your observation and treatment is one that cannot be turned aside. To be in a position to help make disabled persons self-supporting and by the restoration of their earning capacity regain self-reliance; to become citizens once more productive industrially, by encouraging them to enter different activities of life; to show them there is no such thing as "no hope;" and that they can take their places among men, not as objects of charity but as self-reliant citizens—these are worth-while objectives.

DISCUSSION

DR. G. B. Pearson (Newark): I did not get it to hear the start of the paper, but I would like to ask about that thirty-day period. I was under the impression that the compensation extended for medical treatment over a thirty-day period.

What about the compensation beyond that —after the thirty-day period. Supposing a man was disabled for six months, and required care? Would the doctor be paid by the employer?

Dr. D. T. Davidson (Claymont): I must also introduce my remarks, as Dr. Pearson did, by saying I missed the first part of the paper, for which I am profoundly sorry, because I had looked forward to it.

As to the thirty-day question, I know it is customary, in case of treatment beyond the first thirty days, to request an extension, which the Board usually grants, and I must admit that I misunderstood Mr. McManus as to whether or not you have authority to order the doctor be paid and the hospital be paid beyond that first thirty days.

There was another question which Mr. McManus touched upon which was not altogether clear to me. After a man is cured medically, and then needs rehabilitation, does that additional expense for massage, for instance, and physiotherapy, come within the scope of the law? Does the supplying of glasses come within the scope of the law if there is a defect for which a man is being paid?

Dr. G. W. K. Forrest (Wilmington): I would like to ask Mr. McManus whether or not the occupational diseases are listed in your Board, or whether you have to determine. You did not quite make that clear to me—whether each case is decided upon its merits as it is presented to your Board. In other words, are your occupational diseases mentioned in your minutes which you might keep as your records?

MR. McManus: I will take the first question, as to the thirty-day period. For the first thirty-day period the law allows one hundred fifty dollars to cover all medicine, hospital supplies, medical expenses, and so forth. Any expense in excess of that is either a direct loss to those administering the services or will be paid for by the injured man.

If the injured man or someone in his behalf makes application to the Board for additional medical services extending beyond the first thirty-day period, the Board may grant that for such time as they deem advisable, usually for a thirty-day period at a time.

Does that answer your question?

DR. PEARSON: I think so, Mr. McManus, but in the case of a broken leg, for instance, a man would be needing treatment much longer than thirty days. Does the Board set a fee for that?

MR. McManus: No. The Board does not set any fees except when the Board calls in the medical man for testimony, when, I believe, it can set the munificent sum of five dollars. (Laughter) Setting the fee of the doctor is not within the power of the Industrial Acts Board, and I believe the Board prefers that the application for additional medi-

cal care be made by the attending doctor or surgeon, or, if not, by the hospital doctor.

Now, when they make that application, unless there is some substantial objection on the part of the employer or his representative, it is granted. As a matter of fact, on every application for additional medical care, the employer or the employer's agent is contacted, and they have the right to object or to agree to it. So far I have had very few who objected to it.

Does that answer your question?

Dr. Pearson: Yes.

Mr. McManus: Now, then, Dr. Davidson, you want to know about glasses. The Board does not have authority to authorize any mechanical appliances at all. I think the insurance companies who represented employers some years ago agreed to pay one-half of the replacement cost of teeth. They voluntarily assumed that. I forgot your other question.

DR. DAVIDSON: The other was a question of money after the first thirty days—of extension.

MR. McManus: The extensions are practically unlimited. The only thing about the extensions is the Board's decisions as to whether they will grant them or not. The Board has the authority to decide whether the additional medical services are necessary, and whether the rates charged are appropriate. That does not mean that they set rates, but they will not allow excessive rates. However, that is rarely done.

Now, then, Dr. Forrest asked me a question about the occupational diseases. The law extending coverage to occupational diseases sets forth in the Act the various occupational diseases that are covered. I cannot enumerate them to you just now, but only such occupational diseases as are set forth in the Act are compensable.

Dr. Forrest: Suppose it is some disease that is not recognized in the Act. The Board would have power to determine whether or not that—

Mr. McManus: Whether that comes within the purview of the Act. They would pass on that.

Dr. Forrest: The Board would pass on that?

Mr. McManus: Yes, sir.

THE TREATMENT OF PNEUMONIA'

JOHN J. CASSIDY, M. D.

Wilmington, Del.

In this paper I am going to show that there are some therapeutic measures which are of value in the treatment of pneumonia, and that the present state of our knowledge of the subject indicates that we should treat the underlying pathology. It is true that the condition is a self-limiting one, and this fact was the basis for treatment which was designed merely to support the patient. It is true that the condition will take care of itself, but why subject the body to the insults due to the pneumonitis when we have at hand remedial agents which directly affect the condition?

Specific drug therapy, the search for which has been pursued since the first description of the condition, and is still being carried on, certainly has given but very meagre results and must be classified as a failure. For proof of this, it is necessary only to examine the great number of drugs heralded from time to time as being specific, only to be discarded after a more complete trial. This includes the drugs which were supposed to directly affect the condition, as well as those proclaimed as beneficial due to their anti-bacterial properties as demonstrated in vitro and in animals.

With the isolation and positive identification of the pneumonococcus as the etiologic factor of the disease, the attention of investigators was directed towards the finding of a biologic specific. The result obtained was only partially successful. Two reasons may be given for this: (1) the insufficient classification of the organism causing the condition; and (2) the great length of time necessary to classify the organism.

The organism has been isolated in thirty-two different strains. For most of these strains at this time, we have no specific antiserum which is of value, but for Type I and Type II, which are the causative factors in 60%-70% of all the pneumonias seen, we have a serum which is of value. For Types V, VII and VIII the serum may be of value.

The length of time necessary to classify the organism formerly was 36 hours. This, with

^{*}Read before the Medical Society of Delaware, Wilmington, October 12, 1937.

the technic of Neufeld, has been reduced to one hour. Bear the axiom in mind that the earlier these biologicals are used therapeutically, the better results may be expected. We have made a decided step forward since this technic was given to us.

The method of treating with anti-serum is:
As soon as the causative organism has been typed, and this should be done as soon as the diagnosis of pneumonia has been made, the individual should be tested for sensitivity, since this serum is prepared from immunized horses. A careful history should be obtained to find out if the individual has had any previous injections of any horse serum preparations, as well as finding whether there has been any hay fever, asthma, or hives. Even if a negative history is obtained, it is still necessary to test the individual.

This is carried out by injecting intra-cutaneously, a small portion of the diluted serum. In the sensitive individual there will be produced a wheal, surrounded by an area of erythema.

Another technic is to place one drop of the anti-serum, diluted 1-10 with saline, in the eye. In the sensitive individual there will be produced a transitory redness and inflammation of the conjunctiva. If either or both of these tests are negative, then the serum may be administered.

The serum is then warmed to body temperature and 10,000 units are slowly injected intravenously, followed in one hour by 20,000 units, and repeat 20,000 units every four to six hours until the temperature, pulse and respiration approach normal. To produce the crisis, it will be necessary to use 100,000 to 200,000 units. The physical findings at this time will be the same as those found at the time of crisis not produced artificially, that is, an impaired percussion note and showers of moist rales. These findings will persist for 3-4 days after the production of the artificial crisis. If at any time during this post-crisis period, the temperature rises to 102° or more, the serum should be administered again.

From what I have stated, it might be assumed that I am of the opinion that it is necessary only to treat pneumonia specifically and to forget all the supportive treatment. That is not so. It is just as necessary to institute

supportive treatment, even though using this specific treatment, as it was before the time when it was available. It is still necessary to relieve those stabbing pains of pleurisy, the distressing tympanities, the distension of the bladder due to retention of urine, the agonizing cough, the wildly racing heart, the anoxaemia, the delirium, the sleeplessness, all must be promptly relieved, if the patient is to follow a satisfactory course in combating the disease.

Relief of the pleuretic pain may be obtained by drugs, such as codeine or paregoric, but in some instances, morphine may be necessary. Of aid to the drug therapy here, is physiotherapy—the application of heat, either as mustard plasters, hot water bottles, or diathermy.

Abdominal distension is best treated prophylactically. A daily enema will, to a large extent, prevent this complication. If the distension persists, in spite of enemas, the insertion of the rectal tube often gives good results, as will the application of warm stoupes to the abdomen. If, in spite of these measures, the distension persists, then one of the preparations of the pituitary gland should be used.

The distension of the urinary bladder due to retention is treated by catheterization.

The treatment of the cough depends entirely on the stage of the illness. In the early stages, when the consolidation is in the process of formation, any attempt to relieve the cough with expectorants is contraindicated. At this stage, the sedative drugs, such as codeine and, in some extreme cases, morphine are the drugs of choice. Later in the condition, that is in the stage of gray hepatization, and in the stage of resolution, expectorant drugs should be used.

The heart in pneumonia is completely ignored by some therapeutically, so long as it is not showing the effects of the toxins produced by the process in the lung. Some others hold to the theory that it should be treated prophylactically with small doses of digitalis (gr. 1ss t.i.d.) from the very onset of the condition, and that we are not justified in waiting for signs of cardiac collapse before instituting cardiac therapy. No matter which school of thought we are going to follow, it is necessary to watch the heart very closely all

through the pneumonia. Watch it indeed even more closely than the lungs. If collapse is imminent or has taken place, then complete digitalization by the rapid method is necessary.

Anoxaemia is best treated with oxygen. It is necessary to combat anoxaemia speedily because it produces pulmonary edema, which in turn tends to increase anoxaemia; thus a vicious cycle is formed. Other results which are obtained by treating anoxaemia with oxygen are:

We are able to supply the body the extra oxygen necessary to care for the increased metabolism always present during this stage of the condition, and we are also decreasing cardiac effort which is quite necessary since the cardiac effort may be beyond the ability of the toxin-laden myocardium, and result in cardiac collapse.

A few words here as to the methods of using oxygen. It should be used in a concentration of not less than 35%-40% and not greater than 50%-60%. It is best administered in an oxygen chamber where the concentration can be regulated absolutely. Such chambers are not available to all of us, but the portable oxygen tent can be substituted for it with good results. In this the necessary concentration can be obtained. If the oxygen chamber and oxygen tent are not available, then the nasal catheter method of administration may be In using this method, care must be exercised to insert the catheter properly. It must be inserted to the level of the nasopharynx, but not beyond.

As to the time of administering oxygen. The rule is to give it at the first sign of pulmonary edema. The best criteria to determine this are a rise in temperature, the finding of evidence of moisture in the bases, and cyanosis.

The delirium and sleeplessness are overcome by sedatives, such chloral hydrate, the bromides, phenolbarbital, and, if necessary, morphine.

A method of treatment which, while not specific, can be carried out with any other form of treatment which has been instituted, is diathermy. This treatment gives so much relief to the patient that whenever it is available, it should be used. Either the conven-

tional long wave or the newer short wave current may be used, with expectation of achieving the same results. In our small series of cases of pneumonia treated with this method and supportive treatment, we could not quote any decrease in the death rate, but can state that after treatment, the patient was much more comfortable. The usual reaction was a profuse sweat, a fall in temperature of between 1°-2°, usually followed by a period of 1 to 3 hours sleep from which the patient awoke quite refreshed. The termination of the condition is by lysis rather than by crisis, and is accompanied by a very loose non-irritating cough productive of great amounts of pus. After a treatment, many of the patients commented on how well they felt and remarked on how they seemed to be free of pain.

In addition to specific therapy and treatment designed to give symptomatic relief, the general well-being and comfort of the patient must be maintained during the course of his illness. To bring this about, every measure of nursing care and medical treatment must be carried out with this as the first purpose.

Absolute rest is essential. The patient is not allowed to turn himself in bed, nor to raise himself on the bed pan. He should be fed rather than allowed to feed himself. Visitors should be restricted to a minimum, and if possible, prohibited. The room should be well ventilated and cool, yet not too cold. The head of the patient should be elevated. The bed clothes and gown of the patient should be changed when soaked. The mouth should be kept clean and clear of mucous with a satisfactory mouth wash.

Diet during the acute course of the disease is of no great importance. The course of the disease is relatively short, so that any attempt to maintain an adequate caloric intake is unnecessary. Fluid intake, however, must be maintained at a high level, the minimum should be not less than 3000 cc. daily. The protein intake per day should be approximately 1 gram per kilo. The carbohydrate intake should be high enough to prevent acidosis and to furnish nourishment for the myocardium. This high carbohydrate level can be maintained by fruit juices to which may be added, if necessary, glucose intrave-

nously. The chloride deficiency may be made up by giving salt. Milk and milk products may be included in the diet, provided there is no uncontrollable tympanities. Alcohol, especially in those patients accustomed to its use, is very beneficial, if used in small frequent doses.

Summary:

1. Specific biologic treatment should be used in pneumonia, as soon as the diagnosis is made, provided the causative organism is one which responds to anti-serum.

2. General supportive treatment should be vigorously carried out.

3. Diathermy is a form of treatment which should be carried out if available, regardless of what other course of treatment is followed.

4. Good nursing care is essential.

DISCUSSION

DR. JOSEPH R. BECK (Dover): Mr. Chairman, Dr. Cassidy has given a very excellent paper, and as a representative of the State Board of Health I feel that there is a field in which the State Board can be active in aiding in the treatment of pneumonia, by establishing typing stations throughout the state, in conjunction with the hospitals in Wilmington.

Of course, most of you men here are from Wilmington, and do not realize how difficult it is for the general practitioner to have sputum typed throughout the state. For the past few years we have been typing pneumonia sputums in Delaware. Last year we had twenty requests for typing, which were fulfilled.

The mass study of pneumonia by Lord and Henry has clearly shown that the mortality of Type I pneumonia, which is ordinarily twenty-five per cent without the use of antiserum, can be reduced to about ten or twelve per cent, and that the mortality of Type II pneumonia, which is about thirty per cent, can be reduced to about fifteen.

Recently, within the last year, Cecil reported a small series of cases in which serum was given within the first twenty-four hours, and he found that the mortality in this smaller series was reduced to eight per cent, which is really remarkable.

There was one point in Dr. Cassidy's paper about digitalization. He said that if you have

a failing myocardium the patient should be digitalized. I think that is still a debatable point, because the use of digitalis has not been definitely proven in a series of cases in New York City.

I think it was about 1932, at Bellevue, that they found that patients who were not digitalized did much better than patients who were. Other things being equal, they tried to run comparative controls.

If funds were made available, it would be well for the State Board to supply serum to all physicians free of charge, as New York is doing, and as Massachusetts has done for the last five years. Serum at present is very expensive, and to treat the average case, which requires at least eighty thousand units of antiserum, it would cost about thirty-two dollars, and at physicians' prices it would be double that. So that if funds were available I think they could well be spent in supplying physicians with Type I and Type II antiserums provided the type case was known and the serum could be supplied.

I think it was a very excellent paper.

Dr. A. C. Smoot (Georgetown): I would like to ask a question. A few years ago I read some articles on the use of potassium permanganate in the treatment of pneumonia. I would like to know what the rationale of that treatment was—the purpose of it.

DR. JOHN J. CASSIDY (Wilmington): I advocated digitalization after cardiac collapse.

As to the typing, I think that the desire of the Board of Health to put typing stations at various places throughout the state is a very commendable one on the part of the Board, but if one is so far away from the typing station that he could not get to it, this new technique of Neufeld is so simple that any of us can do it. It is merely the admixing of a drop of the sputum and a drop of the serum, and watching the reaction of the capsules-the swelling and the staining of the capsules. It is a simple technique that any of us can use even if we do not have available the Board of Health typing stations. course, it is better to have experienced technicians doing it.

Concerning your question, Dr. Smoot, as (Concluded on Page 220)

EDITORIAL

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THE 149TH ANNUAL SESSION

The annual session of the Medical Society of Delaware was held at Dover, October 11th and 12th, and was an unusually successful one. From the standpoint of attendance, 60 per cent of our members registered, a record that has been exceeded only a very few times. This was due to the excellent scientific program that had been prepared, a program that found 100 per cent of the essayists on hand, with contributions that made this session a particularly educational one. All of these papers were presented by out-of-state physicians, a return to an experiment that has been tried a few times before, each time with signal success. The discussions by the local physicians showed a grasp and up-to-dateness

that reflected great credit upon those who participated.

The House of Delegates transacted a considerable volume of business with neatness and dispatch, which will appear in detail in the December issue of THE JOURNAL. It elected the following officers: first vice-president, Dr. Bruce Barnes, Seaford; second vicepresident, Dr. C. G. Harmonson, Smyrna; secretary, Dr. John H. Mullin, Wilmington; treasurer, Dr. A. L. Heck, Wilmington; councilor, Dr. Roger Murray, Wilmington. The next session was allocated to Wilmington in October, 1939. At the General Meeting, Dr. Meredith I. Samuel, of Wilmington, was elected president for 1939.

In addition to the foregoing, a public meeting was held in the evening, which was the unquestioned highlight of the session, and which was addressed by Dr. Morris Fishbein, editor of the Journal of the American Medical Association, who traced the socio-political trends of American medicine from 1930 to date. This was a factual recital, interspersed with just enough humor, and that it was most popularly received by the audience, which filled the hall, was evidenced by the enthusiastic applause at its conclusion.

The Woman's Auxiliary also held its annual meeting, under the presidency of Mrs. Ira Burns, of Wilmington, and considerable progress in their varied activities was reported.

The Kent County Society, as the host to the convention, did an excellent job, and the profession of Delaware ean look back at the 1938 meeting with justifiable pride.

CORRECTION

In the issue of June, 1938, in the paper on "Creeping Eruption," the author, Dr. F. Earle Kunkel, was listed as an assistant professor of dermatology, University of Pennsylvania. The correct title should have been that of instructor. We regret the error.

THE A. M. A. SPEAKS

For the third time in the history of the A. M. A., a special meeting of the House of Delegates was held in Chicago, September 16 and 17, 1938, to formulate an official policy and to devise an official program for its constituency. The transactions of this epochal meeting were published in full in the Journal of the A. M. A. for September 24, 1938, which every member should carefully preserve, together with the issue of July 30, 1938, which contains the full program of the Federal Government, as outlined in the National Health Conference in July, which said conference occasioned this special meeting of our House of Delegates 164 of its 175 members being present.

At the conclusion of an extremely busy twoday session, the House unainmously adopted the following:

Recommendation I

"1. The establishment of a Federal Department of Health with a Secretary who shall be a doctor of medicine and a member of the President's cabinet.

"2. The general principles outlined by the Technical Committee for the expansion of Public Health and Maternal and Child Health Services are approved and the American Medical Association definitely seeks to cooperate in developing efficient and economical ways and means of putting into effect this recommendation.

"Any expenditure made for the expansion of public health and maternal and child health services should not include the treatment of disease except in so far as this cannot be successful accomplishment through the private practitioner.

Recommendation II

"We favor the expansion of general hospital facilities where need exists. The hospital situation would indicate that there is at present greater need for the use of existing hospital facilities than for additional hospitals.

"We heartily recommend the approval of the recommendation of the Technical Committee stressing the use of existing hospital facilities. The stability and efficiency of many existing church and voluntary organizations could be assured by payment to them of costs of the necessary hospitalization of the medically indigent.

Recommendation III

"We advocate recognition of the principle that the complete medical care of the indigent is a responsibility of the community, the medical and allied professions, and that such care should be organized by local government units and supported by tax funds.

"Since the indigent now constitute a large group in the population, we recognize that the necessity for state aid for medical care may arise in poorer communities and the Federal Government may need to provide funds when the state is unable to meet these emergencies.

"Reports of the Bureau of Census, the U. S. Public Health Service, and of life insurance companies show that great progress has been made in the United States in the reduction of morbidity and mortality among all classes of people. This reflects the good quality of medical care now provided. We wish to see continued and improved, the methods and practices which have brought us to this present high plane.

"We wish to see established well coordinated programs in the various states in the nation, for improvement of food, housing, and the other environmental conditions which have the greatest influence on the health of our citizens. We wish also to see established a definite and far reaching public health program for the education and information of all the people in order that they may take advantage of the present medical service available in this country.

"In the face of the vanishing support of philanthropy, the medical profession as a whole will welcome the appropriation of funds to provide medical care for the medically needy, providing first, that the public welfare administrative procedures are simplified and coordinated; and second, that the provision of medical services is arranged by responsible local public officials in cooperation with the local medical profession and its allied groups.

"We feel that in each state a system should be developed to meet the recommendation of the National Health Conference in conformity with its suggestion that 'The Role of the Federal Government should be principally that of giving financial and technical aid to the states in their development of sound programs through procedure largely of their own choice.'

Recommendation IV

"We approve the principle of hospital service insurance which is being widely adopted throughout the country. It is capable of great expansion along sound lines, and we particularly recommend it as a community project. Experience in the operation of hospital service insurance or group hospitalization plans has demonstrated that these plans should confine themselves to provision of hospital facilities and should not include any type of medical care.

"We recognize that health needs and means to supply such needs vary throughout the United States. Studies indicate that health needs are not identical in different localities but that they usually depend on local conditions and therefore are primarily local problems. We therefore encourage county or district medical societies, with the approval of the state medical society of which each is a component part, to develop appropriate means to meet their local requirements.

"In addition to insurance for hospitalization we believe it is practicable to develop cash indemnity insurance plans to cover, in whole or in part, the costs of emergency or prolonged illness provided they have the approval of county and state medical societies in localities in which they operate. Agencies set up to provide such insurance should comply with state statute and regulations to insure their soundness and financial responsibility.

"We are not willing to foster any system of compulsory health insurance. We are convinced that it is a complicated, bureaucratic system which has no place in a democratic state. It would undoubtedly set up a far reaching tax system with great increase in the cost of government. That it would lend itself to political control and manipulation there is no doubt.

"We recognize the soundness of the principles of workmen's compensation laws and recommend the expansion of such legislation

to provide for meeting the costs of illness sustained as a result of employment in industry.

"We repeat our conviction that voluntary indemnity insurance may assist many income groups to finance their sickness costs without subsidy. Further development of group hospitalization and establishment of insurance plans on the indemnity principle to cover the cost of illness will assist in solution of these problems.

Recommendation V

"In essence the recommendation deals with compensation of loss of wages during sickness. We unreservedly endorse this principle as it has distinct influence toward recovery and tends to reduce permanent disability. It is, however, in the interest of good medical care that the attending physician be relieved of the duty of certification of illness and of recovery, which function should be performed by a qualified medical employee of the disbursing agency."

The medically indigent were defined as follows:

"A person is medically indigent when he is unable in the place in which he resides, through his own resources, to provide himself and his dependents with proper medical, dental, nursing, hospital and pharmaceutical care and therapeutic appliances without depriving himself or his dependents of necessary food, clothing, shelter and similar necessities of life, as determined by the local authority charged with the duty of dispensing relief for the medically indigent."

To confer with Federal officials and the proper interested groups of the laity the Speaker appointed as members of the liaison committee: Dr. Irvin Abell, Louisville, president American Medical Association, chairman; Dr. Walter-F. Donaldson, Pittsburgh; Dr. Frederic E. Sondern, New York City; Dr. Walter E. Vest, Huntington, West Virginia; Dr. Fred W. Rankin, Lexington, Kentucky; Dr. H. A. Luce, Detroit; and Dr. E. H. Cary, Dallas, Texas.

It is now the duty of every loyal member of the A. M. A. to become familiar with the above program, and to use his influence to assure its successful attainment.

THE TREATMENT OF PNEUMONIA

(Concluded from Page 216)

to the action of potassium permanganate in pneumonia, how was that administered?

DR. SMOOT: Rectally.

Dr. Cassidy: Unless they are going along the idea of supersaturating the blood stream with oxygen, that is the only rationale I can see. It may be that they are figuring on the absorption of the oxygen. I do not know of any other rationale.

I did not see that particular paper in looking that up. Do you mind telling me where you saw it?

Dr. Smoot: I do not believe I can tell you now.

A. M. A.—N. B. C. Radio Program— "Your Health"

The radio program, "Your Health," to be broadcast by the American Medical Association and the National Broadcasting Company during the fall, winter and spring of 1938-39, will be broadcast over the Blue network each Wednesday at 2 p. m., Eastern standard time, beginning Wednesday, October 19th. Station WDEL is allied to the Red network, and while wishing to offer this program, will not be able to do so. Listeners in this territory should tune into Station WJZ direct.

This is not a program of health talks, but of 30-minute dramatizations written and produced by professional radio artists, with orchestra accompaniment. It is prepared on the basis of information furnished by the Bureau of Health Education of the American Medical Association. It is intended to supplement, dramatize, and enrich health instruction in the schools, but not to take the place of classroom instruction, textbooks or project teaching. It will correlate with any standard system of textbooks.

Dr. Parran to Speak Here

Dr. Thomas Parran, Jr., Surgeon-General of the U. S. Public Health Service, will speak at the New Century Club, 1014 Delaware avenue, Wilmington, on Wednesday, November 9th, at 3.15 p. m. His subject will be, "The Road Ahead in Public Health." Special invitation is hereby extended to the medical profession, to the Woman's Auxiliary, and to public health officials to attend.

Public Health Aspects of Industrial Hygiene

R. R. Sayers and J. J. Bloomfield, Washington, D. C. (Journal A. M. A., August 20, 1938), believe that if the general health of a most important and numerous group (industrial workers) in the population is to be improved it will be necessary not only to control unhealthful conditions in the working environment but also to give consideration to such factors as proper living conditions, elimination of strain and hurry, nutrition and communicable diseases; in fact, to a general adult health program for workers. A broad industrial health program of this character to progress satisfactorily must be closely interwoven with existing public health activities. Health officials increasingly emphasize the industrial phase of public health, because any active program among industrial workers will improve the general health in the state. In order to carry on any kind of public health work in the factory it is necessary that the personnel know industry and industrial processes, and for this reason the persons expected to guide the work most successfully are those particularly trained in the field of industrial hygiene. A large portion of gainfully employed persons who work in small establishments have not as yet been provided a satisfactory industrial health service. The responsibility of the family physician in this phase of the problem must not be overlooked. There must be a closer cooperation between the industrial hygiene personnel in a state health department, the various local public health units and all medical practitioners, in an attempt to bring public health to gainfully employed persons and indirectly to their families. The situation as regards industrial health constitutes a challenge which the physicians ethically and morally, regardless of the particular field in medicine which he has elected to follow, cannot and should not seek to escape. He may assume leadership now with faith in his ability to serve effectively through the promotion of a cooperative and not a competitive broad health program.

International Assembly

The Inter-State Postgraduate Medical Association of North America extends a very cordial invitation to all physicians in good standing to attend the International Assembly of the Association to be held in the city of Philadelphia, Pennsylvania, October 31, November 1, 2, 3 and 4, 1938. All clinics and lectures will be held in the public auditorium. The registration fee is \$5.00.

An unusually interesting clinical and didactic program including all branches of medicine and surgery and the specialties has been arranged by the program committee.

In cooperation with the Philadelphia County Medical Society, and the Pennsylvania State Medical Association, and with the active support of the Philadelphia Chamber of Commerce, and Philadelphia Convention and Tourist Bureau, a most excellent opportunity for an intensive week of postgraduate medical instruction is offered by a very large group of acknowledged leaders in the profession.

Elliott P. Joslin, M. D., president; Edward W. Archibald, M. D., Charles H. Mayo, M. D., William J. Mayo, M. D., presidents of clinics; George W. Crile, M. D., chairman, program committee; William B. Peck, M. D., managing director.

International Physicians' Luncheon Club

The International Physicians' Luncheon Club of New York extends a most cordial invitation to physicians visiting New York to be honored guests at an excellent international luncheon, at the same time offering the services of the members of the club for any information they may desire.

While guests are not requested to make speeches, any useful information they wish to give informally will be greatly appreciated as fostering medical progress and international goodwill among physicians from all over the world.

Luncheon is served at the International Medical Center, 135 East 55th street, New York, every Tuesday punctually at 1 o'clock and is over about 2 o'clock. Physicians are kindly requested to inform the club of their presence not later than 9 a.m. Tuesday by telephoning Wickersham 2-7900, or writing International Physicians' Luncheon Club, 135 East 55th street, New York.

Rabies: Report of Twelve Cases, With Discussion of Prophylaxis

Maurice L. Blatt, Samuel J. Hoffman and Maurice Schneider, Chicago (Journal A. M. A., August 20, 1938), discuss the twelve cases of rabies admitted to the Cook County Hospital between 1929 and 1937. All proved fatal. The diagnosis in each case was confirmed by necropsy. The incubation period for the patients varied from two weeks to two months. The closer the site of the bite to the central nervous system the shorter was the incubation period. Wounds made by the bites of animals should immediately be cauterized with nitric acid. The Pasteur treatment or one of its modifications should be instituted in accordance with rules outlined and accepted. The twelve persons whose cases are reported died after suffering great agony and might have been saved if adequate prophylactic measures had been instituted immediately. They were admitted to the hospital after having been ill from two to seven days and anywhere from two weeks to two months after they had been bitten by dogs. Stringent enforcement of regulations governing ownership, licensure, muzzling and leashing of dogs would have prevented the bites. The extent of this problem is evidenced by the fact that in the state of Illinois alone 18,466 dog bites were reported to the state department of public health in 1936 and that there were ten deaths from rabies. A knowledge of similar facts would divulge a tremendous loss of time and of lives of human beings and animals of the United States from a preventable cause. When such knowledge becomes public it will be of inestimable educational value in the eradication of this dreadful malady.

BOOK REVIEW

Materia Medica: Drug Administration and Prescription Writing. By Oscar M. Bethea, M. D., Professor of Therapeutics, Tulane Graduate School of Medicine, 5th Edition. Pp. 577. Cloth. Price, \$5.00. Philadelphia: F. A. Davis Company, 1938.

The author, in this new edition, brings his subject matter up to date. It contains an abundance of information. The formulas given are to be found in the modern treatment of medicine and have proven their worth over a period of time. The chapter on prescription writing and drug administration is well worth studying. It is a work that the recent graduate needs as a reference. author makes no claim that he is giving all the drugs found in the U.S. Pharmacopeia, but he does give the ones most used in the practice of the medical art. The book is well written and the style is good. The work is wholly satisfactory.

You Can Sleep Well. By Edmund Jacobson, M. D., Director of the Jacobson Laboratory for Chemical Physiology, Chicago. 269, with 40 illustrations. Cloth. Price, \$2.00. New York: McGraw-Hill Book Company, 1938.

The author has done considerable research work in the field about which he writes. In 1934, his other book for the layman, "You Must Relax," became a best seller. The present subject is clearly presented, in considerable detail, and is of interest and profit to the professional as well as to the lay reader.

Cancer: Diagnosis and Treatment. Compiled by the Committee on Cancer Education of the Colorado State Medical Society. Pp. 75. Denver: Colorado State Board of Paper. Health, 1938.

This is another of the small manuals that are to have a place on the desk of the busy physician, to use as a concise and authoritative guide in advising the patient as to diagnosis and treatment. It is complete enough to serve its purpose.

Cancer of the Breast and Cancer of the Uterus. By Marion E. Anderson, M. D. Pp. Clinton (Iowa): illustrated. Paper. Marion E. Anderson, 1938.

The observations and readings of a single author are recorded here. No attempt at a formal text is made. The booklet is attractively printed.

STATEMENT OF THE OWNERSHIP, MAN-AGEMENT, CIRCULATION, ETC.

Required by the Act of Congress of August 24, 1912 of the Delaware State Medical Journal, Published Monthly at Wilmington, Delaware, for October 1st, 1938.

STATE OF DELAWARE

STATE OF DELAWARE COUNTY OF NEW CASTLE SS.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared M. A. Tarumianz, M. D., who having been duly sworn according to law, deposes and says that he is the Business Manager and Associate Editor of the Delaware State Medical Journal, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of— Publisher, Medical Society of Delaware, Wilmington, Delaware.

Editor, W. Edwin Bird, M. D., Du Pont Bldg.,

Wilmington, Del. Associate Managing Editors, M. A. Tarumianz, M. D., Farnhurst, Del., and Dr. A. V. Gilliland, Welfare Home, Smyrna, Del. Business Manager, M. A. Tarumianz, M. D.,

Farnhurst, Del.
2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given).

The Medical Society of Delaware.

That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none,

so state)-None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and se-curity holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stocks, bonds or other securities than as so stated by him. M. A. TARUMIANZ, M. D.

Sworn to and subscribed before me this 10th

day of October, 1938. W. TRUXTON BOYCE, Notary Public (My commission expires Sept. 15, 1941)

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Initial dosage should be small, ranging from a minimum of 2.5 mg. (1/4 tablet) to 5 mg. (1/2 tablet). These should be regarded as test doses, and if no effect is obtained from the smallest amount given, the dosage may be progressively increased until a definite effect manifests itself. Usually it is unnecessary to give more than 10 mg. at a single dose. Careful medical supervision during this test period is particularly desirable.

When the correct dosage has been determined, it may be given two or three times a day, bearing in mind that administration in the late afternoon or evening may interfere with sleep. When divided doses are required, the specially grooved tablet may be broken and one-half or one-quarter tablet given.

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